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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,022	01/07/2002	Asok K. Perumainar	P7213	2620
32658	7590	03/24/2006		
HOGAN & HARTSON LLP ONE TABOR CENTER, SUITE 1500 1200 SEVENTEEN ST. DENVER, CO 80202			EXAMINER MOSSER, KATHLEEN MICHELE	
			ART UNIT	PAPER NUMBER
			3715	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/041,022	PERUMAINAR, ASOK K.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kathleen Mosser	3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>02/01/02</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-6 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Gardner et al (US 5239617). Gardner et al teaches a method including: providing an interpreter interface including a code entry portion adapted for receiving input from a user (user interface 26); receiving a single code entry from the user via the code entry portion (the user inputs a command, see col. 4: 66-68); processing the code entry and in response to the processing, displaying a visual cue to the user (col. 5: 1-13), as in **claim 1** and the computer program product of claim 11. The processing including comparing syntax of the code entry to a set of syntax rules for the programming language to identify a syntax error or validity of the code entry syntax (**claim 2**) is taught in at least col. 5: 22-24. Regarding **claims 3-5,12 and 13** the steps of determining an "error code", displaying the error code, and keeping an error history is shown in at least col. 9: 1 – col. 12:15, where a working example of the method is shown. When no error is determined the command is executed (**claims 6 and 14**), as is shown in col. 5: 1-3.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claims 1, 6-10, 11, and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 5204960) in view of Mizumoto et al (US 6550056). Smith et al teaches a computer program product, system and method for its use including: means for receiving a code entry from a user (receipt source file from the user, Figure 2, step 200); and a syntax validation processing the received code entry based on syntax rules for the programming language to determine syntax validity or a syntax error (col. 5: 39-40 and the inherent nature of how compilers work, as in **claims 1, 11 and 16**. During compilation of a program the system determines whether the proper syntax has been used for the entirety of the program), as in **claims 6, 14 and 16**. An execution engine (**claim 19**) is shown in Figure 6 element 508.

Smith et al fails to explicitly teach the use of a semantic view engine displaying a semantic view to the user based on the determined syntax validity or the syntax error (**claim 16**); that the display includes effects of the executing of the code entry (**claims 7 and 15**), including type, name and value of a variable (**claims 8 and 18**) or objects (**claim 9**) and arrays (**claim 10**), the error statement associated with the syntax error (**claims 17 and 20**). Mizumoto et al teaches a debugger program for use with program compilers (like that of Smith) including a user interface unit for entry of commands and codes (**claim 20**), see Figures 1 and 8; this unit includes the semantic view which displays the state of all variables including the above information, see Figures 3(a—c) and col. 8: 66- col.9: 6. At least Figures 13 and 14 show a display window with a series of entered command or code lines. It would have been obvious to

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implement the debugger of Mizumoto et al with the compiler of Smith et al so as to allow the user of the Smith et al invention to debug and properly correct programming errors within their intended program.


### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - a. Rouquie (US 5274821) teaches an interpreter type program
  - b. Ohta (US 5697788) teaches a system for teaching programming algorithms
  - c. Shulman et al (US 6311323) teaches a system and method for assisting a user in coding a program

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen Mosser whose telephone number is (571) 272-4435. The examiner can normally be reached on M-F 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Kathleen Mosser  
Primary Examiner  
Art Unit 3715

March 20, 2006